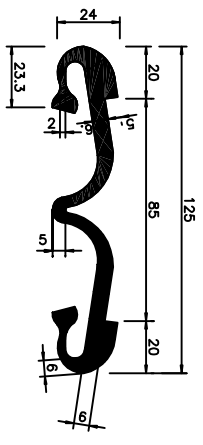
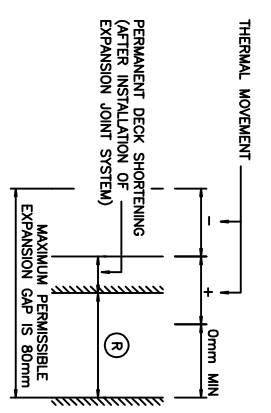


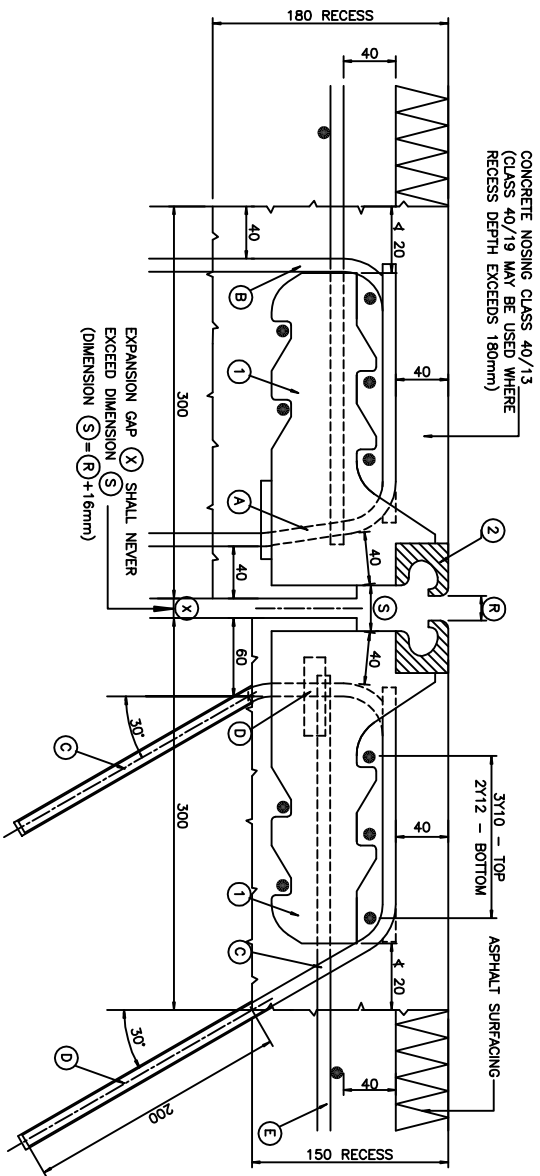
DETAIL OF MAURER D80.C (FP) PROFILE AND ANCHORAGE  
SCALE 1:1



DETAIL OF SEALING STRIP  
SCALE 1:1



PERMISSIBLE MOVEMENT RANGE OF JOINT  
(THE MOVEMENT RANGE OF THE JOINT, MEASURED AT THE DIMENSION (R)S 20 TO 60mm)  
SCALE 1:1



NEW INSTALLATIONS  
DETAIL AT TRAFFIC LANES AND SHOULDERS  
SCALE 1:2

IDENTIFICATION PLATE TO BE CAST INTO BALUSTRADE AT EVERY JOINT (OPTIONAL)  
SCALE 1:10

BRIDGE EXPANSION JOINT	
DATE OF INSTALLATION	NOV. 2001
REF. No	M/915
TYPE	Maurer D80C (FP)
CERTIFICATE No.	

DSC ZENDON c.c.  
TEL No.: (011) 894-1129

LEGEND

- ① ANCHORAGES, 12 mm PLATE PROFILE CUT AS DETAILED AND WELDED TO ITEM ② AT 200 CENTRES.
- ② MAURER D80.C (FP) PROFILE AS DETAILED
- ③ 60 x 40 x 8 mm PLATE WELDED TO ITEM ①
- ④ 2/16 x 16 x 80 SQUARE BARS OR 2/20 mm ROUND BARS - 80mm LONG WELDED TO ITEM ①
- ⑤ Y10 AT 200mm CENTRES OR R12 AT 150mm CENTRES BENT TO FORM STRIRUPS DURING INSTALLATION OF EXPANSION JOINT SYSTEM.
- ⑥ Y10 ANCHORS GROUTED INTO POSITION DURING INSTALLATION OF EXPANSION JOINT SYSTEM.
- ⑦ EXISTING REINFORCEMENT PROTRUDING INTO RECESS OF CONCRETE NOSINGS TO BE RETAINED.
- ⑧ EXPANSION GAP WIDTH AT TIME OF INSTALLATION OF EXPANSION JOINT SYSTEM

NOTES

1. GENERAL
  - 1.1 THIS DRAWING DETAILS THE EXPANSION JOINT SYSTEM MAURER D80.C (FP) CATERING FOR A TOTAL MOVEMENT OF 80 mm.
  - 1.2 THE JOINT CONFIGURATION WILL BE ADJUSTED TO MATCH THE "AS CONSTRUCTED" PROFILES OF THE PARAPETS, SKEW ANGLE AND BRIDGE DECK PROFILE FOR EACH INDIVIDUAL BRIDGE.
  - 1.3 FOR EXISTING WORK, REQUIRING JOINT REPLACEMENT THE POSITIONS OF THE BENDS IN THE EXPANSION JOINT SYSTEM WILL MATCH THE JOINT LAYOUT AND BRIDGE PROFILE OF THE INDIVIDUAL BRIDGES. IN NO CASE WILL THE RADIUS OF A BEND BE LESS THAN 100 mm.
  - 1.4 COMBINED VERTICAL AND HORIZONTAL BENDS WILL BE AVOIDED BY PROVIDING DEEPER RECESSES INTO PARAPET AND/OR KERB FACES TO ACCOMMODATE THE BENT-UP SECTIONS OF THE JOINT PROFILES.

2. DESIGN

- 2.1 MAURER SOHNE D80 BRIDGE EXPANSION JOINTS ARE DESIGNED AND TESTED IN ACCORDANCE WITH TL/TR-FU92. BOTH STATIC AND DYNAMIC CRITERIA APPLY.
- 2.2 DESIGN LOADINGS ARE IN ACCORDANCE WITH DIN1072 INCLUDING DYNAMIC FACTORS:
 

STATIC LOADINGS	140 kN
VERTICAL LOADS	84 kN
HORIZONTAL LOADS	84 kN
FATIGUE LOADINGS	84 kN
VERTICAL LOADS	21 kN
HORIZONTAL LOADS	20 MILLION
- 2.3 MAURER D80C(FP) EXPANSION JOINTS ARE MANUFACTURED FROM STANDARD HOT-ROLLED/EXTRUDED MAURER SOHNE CLAW SECTIONS AND THE BSP FISH PLATE ANCHORAGE WHICH HAS BEEN TESTED AND APPROVED BY MAURER SOHNE.

3. MATERIALS

- MATERIALS AND MANUFACTURING WILL COMPLY WITH THE RELEVANT CLAUSES OF SECTION 6600 AND 6700 AND THE STANDARD SPECIFICATION, THE RECOMMENDATIONS OF SABS 0214 AND WILL INCLUDE THE FOLLOWING:
- 3.1 STANDARD MAURER EDGE SECTION STEEL GRADE RST 37-2 TO DIN 17100.
  - 3.1.1 STRUCTURAL STEEL PLATES GRADE 300 W TO SABS 1431.
  - 3.1.2 EPDM STRIP SEAL : TO ASTM D5973
  - 3.2 MANUFACTURING
  - 3.2.1 WELDING: IN ACCORDANCE WITH THE REQUIREMENTS OF BS 5135 (THE DESIGN LOAD EFFECTS DO NOT EXCEED 75% OF THE CAPACITY OF THE SPECIFIED WELDS).
  - 3.2.2 GALVANISING: IN ACCORDANCE WITH SABS 121.
  - 3.2.3 THE EXPANSION JOINT UNITS WILL BE MANUFACTURED TO AN APPROVED "JOINT PLAN" DRAWN UP TO SUIT THE BRIDGE STRUCTURE AND THE PROPOSED CONSTRUCTION SEQUENCE. GENERALLY THE JOINT SECTIONS SHOULD BE IN SUITABLE LENGTHS TO FACILITATE TRANSPORT AND HANDLING. THE JOINT LENGTHS ARE TO BE INSTALLED AS PER THE PLAN AND COUPLED AS DETAILED ON DRAWING No DZ/4.

4. CORROSION PROTECTION

- 4.1 AFTER COMPLETION OF THE JOINT FABRICATION, ALL THE STRUCTURAL STEEL MEMBERS ARE HOT-DIP GALVANISED IN ACCORDANCE WITH SABS 121 TO A MINIMUM THICKNESS OF 105 MICRONS.
- 4.2 ALL DAMAGED GALVANIZED SURFACES THAT WILL NOT RECEIVE AT LEAST A 40mm CONCRETE COVER ARE TO BE REPAIRED BY ABRASIVE CLEANING FOLLOWED BY TWO COATS OF A PROPRIETARY BRAND ZINC RICH GALVANIZING REPAIR COATING OR SPRAY. APPLICATION MUST BE IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS.

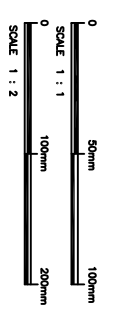
5. GUARANTEES

GUARANTEES AS PER CONTRACT AGREEMENT, WHERE REQUIRED. GUARANTEES FOR THE PRODUCT MUST BE AGREED BETWEEN THE CLIENT AND THE CERTIFICATE HOLDER.

6. MANUFACTURERS

- MANUFACTURER  
DSC ZENDON CC,  
42 MICHELSON ROAD, ANDERBOLT, BOKSBOURG,  
P.O.BOX 6221, DUNSWART, 1508, GAUTENG,  
TEL No (011) 894-1129, FAX No (011) 894-2612
7. APPROVED INSTALLERS
- 7.1 MPMULANGA BRIDGE REPAIRS & SEALS CC - TEL No (011) 894-1129
  - 7.2 DSC ZENDON CC - TEL No (011) 894-1129

PLAN No	DRAWING DESCRIPTION
DZ/6	THORAJOINT® - GENERAL DETAILS
DZ/5	MAURER D80.C (FP) - GENERAL DETAILS
DZ/4	DETAILS OF BOLTED AND SITE WELDED CONNECTIONS
DZ/3	DETAILS AND INSTALLATION OF COVER PLATES
DZ/2	"BSP" 40 - GENERAL DETAILS
DZ/1	"BSP" 80 - GENERAL DETAILS



REV	DATE	AS PER FINAL AGREEMENT CERTIFICATION AMENDMENTS
1	01/07/2004	

STEWART SCOTT  
P.O. BOX 784506  
CAUTION  
TEL No: (011) 780-0811  
FAX No: (011) 853-6789  
EMAIL: stewart@scott.co.za

DSC ZENDON CC  
42 MICHELSON ROAD  
ANDERBOLT, BOKSBOURG,  
P.O. BOX 6221  
DUNSWART 1508  
TEL No: (011) 894-1129  
FAX No: (011) 894-2612  
EMAIL: info@zendon.co.za

BRIDGE EXPANSION JOINTS  
FOR MOVEMENTS > 80mm  
MAURER D80.C (FP) - GENERAL DETAILS

SCALE: AS SHOWN  
PLAN No DZ/5